DOCUMENT RESUME

ED 199 278 TM 810 183

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TITLE Language Competency Testing in the Elementary School.
PUB DATE Oct 80
NOTE 18p.: Paper presented at Southwest Regional NCTE Conference (Las Vegas, NV, October, 1980).

EDRS PRICE MF01/PC01 Plus Postage.
DESCRIPTORS Elementary Education; *English Instruction; *Language Arts; *Language Skills; *Minimum Competency Testing; Multiple Choice Tests; *Scoring Formulas; *Test Construction
IDENTIFIERS *SWRL Scoring System; Test Curriculum Overlap; Writing Evaluation

ABSTRACT

Experiences with competency testing at the elementary level in the area of English language are presented, as well as suggestions for improving the quality of competency tests. In order to modify curricula and requirements to meet the demands of assessment and to ensure sufficient student instruction, the following suggestions are made: (1) assessment must be based on what students have had the opportunity to learn; (2) composition ability is a very important part of English language competency and is best assessed through a writing sample; (3) end-of-elementary-school assessments need to reflect what students could be expected to learn in the years prior to their assessment, just as grade-by-grade assessments need to parallel grade-by-grade instruction; and (4) in constructing multiple-choice items, care must be exercised to use only those words that are taught at least one grade level below the level of the assessment, to select the appropriate distractor, to give enough information to answer the question, and to avoid testing reading ability when the objective is to test writing ability. Scoring systems for writing assessment are included. (RL)

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LANGUAGE COMPETENCY TESTING IN THE ELEMENTARY SCHOOL

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TM 810 183

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LANGUAGE COMPETENCY TESTING IN THE ELEMENTARY SCHOOL*

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Competency testing is currently a major educational concern. It is increasingly common at the high-school level and is moving into the elementary school. Many states and local school districts are requiring students to pass competency tests, usually in the three traditional areas of reading, writing, and math. California, for example, will soon require students to pass a competency test before leaving sixth grade. Some school districts have instituted grade-by-grade tests at the elementary level, often for the purpose of permitting or denying promotion to the next grade. For example, the Los Angeles schools currently assess competency at the end of grades 1-6; the District of Columbia schools are planning to assess competency at the end of each semester in elementary school.

I'm not going to talk about the pros and cons of competency testing (although that's a big subject itself). Competency testing already exists; it has been mandated by state law and/or by school-district regulation. Therefore, I will talk about what goes into competency testing and how we can have good competency tests. Competency tests are here, so we need to work to be sure that they serve educational goals.

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*Ann Humes' work in this area has provided much of the background for this paper, especially for the discussion of the writing sample. The work of Joseph Lawlor and Larry Gentry is also appreciated.

In this paper I will report on experiences we've had at SWRL with competency testing at the elementary level in the area of English language. "English language" is used here to refer to the various language competencies that are generally outside of reading instruction. It includes spelling and handwriting, which may be taught separately with special textbooks. It also includes what is often called "language" or "English" or "language arts," which covers such areas as punctuation, capitalization, grammar, and usage. And, most importantly, it also covers writing--various aspects of the composing process. Thus, the area of "English language" is large and complex at the elementary level.

CONTENT

Content for competency testing is primarily determined by state or local curricula or by graduation/promotion requirements. However, such curricula and requirements may need to be modified to meet the demands of assessment and to ensure sufficient student instruction.

Since the English language area is so vast and complex, we must set some limits on what we can include in assessment. Oral language skills are generally not assessed because it is difficult to evaluate them, especially for large-scale testing, since there are so many uncontrollable variables. Some skill areas (e.g., alphabetization and use of reference sources) are frequently covered in both reading and English language; duplicate assessment of the same skills is unnecessary, so we can eliminate overlap by assigning these skills to one component or the other, but not to both.

When selecting skills for testing, we need to be sure that the skills are really relevant for assessment. For example, a skill that

is commonly found on skills lists is "Recognizes common and proper nouns." When we looked carefully at that skill, we realized that the reason for it is to help students learn to capitalize properly. However, capitalization is usually included in competency tests, and if students can capitalize correctly, they can clearly recognize common and proper nouns. So that skill doesn't have to be tested separately.

We also must base assessment on what students have had the opportunity to learn. This means that assessed skills must be covered by instruction and must be taught before they are assessed. Studies indicate that commercially prepared materials--most commonly textbooks--define the major activities of the classroom and, therefore, presumably determine what students are apt to learn. In order to design grade-by-grade or end-of elementary-school assessments, test developers must be sure of what is taught. Matching instruction with assessment sometimes conflicts with current testing practices.

It is unfair to assess students on skills unless a school district or a state can ensure that appropriate instruction is taking place in the classroom. For example, many high school competency tests assess student ability with practical matters, e.g., filling out forms. However, elementary textbooks do not generally teach many "practical" skills; thus students probably have not learned them. Therefore, it is important to understand instructional content before preparing assessment instruments in order to be reasonably certain that students are knowledgeable in the areas to be assessed.

Another problem is caused by the conflict between theory and instruction. Despite many current "holistic" views of language instruction

(especially in the area of composition), the skills that receive the most emphasis in textbooks, curricula, and competency lists are generally those that are easiest to describe, practice, and test--i.e., spelling, mechanics (punctuation, capitalization), grammar, and usage. While students are also expected to write compositions, actual writing instruction usually receives less attention. Nonetheless, composition ability is a very important part of English language competency and is best assessed through a writing sample, which requires students to write. The writing sample is a critical component of competency tests, and I will discuss it in detail later in this paper.

Another conflict may arise because of differences between grade-by-grade assessment and end-of-elementary-school assessment. When grade-by-grade assessments are designed, the content should parallel the content of grade-by-grade instruction. Only then can students be expected to demonstrate their proficiencies. End-of-elementary-school assessments must also reflect what students could be expected to learn in the years prior to their assessment. Although the latter assessment can include content from any preceding years, grade-by-grade assessments need to parallel grade-by-grade instruction. In that way, they also serve as useful diagnostic tools; test results can tell teachers what their students did and did not learn in the previous grade, and teachers can use this information to plan appropriate instruction that builds on what students already know and remediates what students do not know.

ASSESSMENT INSTRUMENTS

Large-scale implementation of competency tests usually requires the use of multiple-choice items to permit efficient and inexpensive

administration and scoring. Some skill areas--especially handwriting and the writing sample--require constructed responses by students. Scoring procedures have been developed that permit the classroom teacher (or other scorer) to score student writing quickly and reliably. These scores can be recorded on each student's answer sheet and machine processed along with the other results. This scoring system will be described more fully later in the paper.

MULTIPLE-CHOICE ITEMS

Fortunately, many English language skills can be assessed through multiple-choice items. However, construction of such items is difficult because they often require the student to read in order to respond. Item writers must be careful to ensure that, insofar as possible, students' reading ability does not interfere with their ability to demonstrate English language proficiency. One way to ease the reading load is to use only those words that are taught at least one grade level below the level of the assessment. For example, a fourth grade test uses words that students learn to read in grades 1-3.

Multiple-choice items often look easy to write. However, our experience has shown that there are many pitfalls to watch for when writing them. I'll illustrate a few of the problems we've encountered.

One kind of problem is selection of the appropriate distractor. An item for testing use of the apostrophe in singular possessives illustrates the problem; see Figure 1. Distractor A requires students to distinguish between singular and plural possessives. However, this is supposed to be a fourth-grade item. Unfortunately, students don't generally learn to use plural possessives until fifth grade or later, so

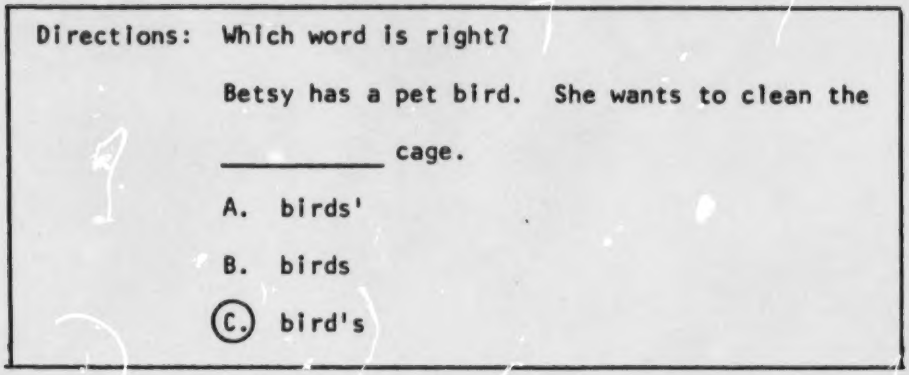

Figure 1. Item for assessing use of apostrophe in singular possessives (grade 4)

distractor A is an unfair choice. One way to fix this item is to replace A with a distractor where the apostrophe is misplaced (e.g., bir'ds).

Another kind of problem occurs when the item doesn't give enough information to answer it. When asked to distinguish singular and plural nouns (see Figure 2), students can't tell that sheep is the correct answer because, alone, sheep may be either singular or plural. Probably the best was to fix this item is to have the correct answer be a word that is clearly plural (e.g., cows, mice).

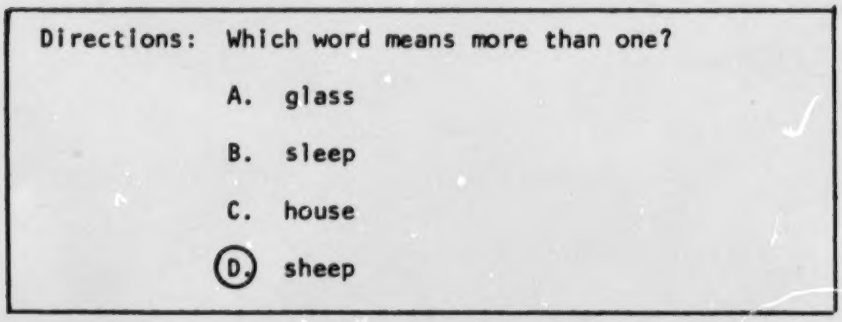

Figure 2. Item for assessing distinction between singular and plural nouns (grade 3)

Another kind of problem is an item that tests reading ability rather than writing ability. For example, a frequently assessed language skill is "Limits a paragraph to one main idea"; this should not be confused with the related reading skill, "Understands the main idea of a paragraph." A typical, appropriate item for the latter reading skill consists of a paragraph and a choice of possible main ideas. However, for the former productive skill ("Limits a paragraph to one main idea") a more appropriate item is a paragraph and a choice of possible sentences that could be added to the paragraph (see Figure 3).

Directions: One sentence can be added to the paragraph because it fits the idea of the paragraph. Which sentence is it?

You must take good care of a pet bird. You must give it water to drink. Its cage must be kept clean so the bird will stay well. You can put paper in the bottom of the cage to make it easy to clean.

A. The bird will get sick if it does not have water.
B. Pet birds can sing sweetly.
C. You can get a pet bird at a pet store.
D. A pet rabbit may also live in a cage.

Figure 3. Item for assessing ability to limit a paragraph to one main idea (grade 4)

We have discovered many problems in writing multiple-choice items. Although such items are easy to score, they are difficult to write. Great care must be taken to ensure that they assess the skills they are supposed to test.

SCORING CONSTRUCTED-RESPONSE ITEMS

Although many component skills can be tested using multiple-choice items, certain holistic tasks require students to actually write something. In the work we have done, we have designed special scoring systems to assess handwriting ability, as well as the ability to write actual compositions.

Handwriting

The handwriting items we have designed require the student to copy a model. Adjacent to each item that the student is to copy, we provide full-in circles for the teacher to use to score the handwriting. In this way, when the computer scores the test booklet for the multiple-choice items, it also "reads" the teacher-assigned handwriting scores.

Teacher scoring is facilitated by the use of a straightforward scoring guide. A three-point scale is used:

1: good letter formation

2: legible, but problems with letter formation

3: illegible; very difficult to read

Of course, different scoring guides could be used to meet the specific needs of a school district.

Although we have not actually done it, this scoring method could be used with other language skills that a district wanted to assess by having students write their answers. For example, students could write words to demonstrate spelling ability; then the teacher would simply fill in a "right" or "wrong" circle to indicate correctness. Such scoring does not

take much teacher time, but it allows both constructed responses and computer data analysis.

Writing Samples

The most important place for this kind of scoring system is with writing samples--when students actually write compositions. A language test that does not assess actual writing is necessarily incomplete. However, we need a scoring system that is fast, accurate, and inexpensive. The system that Ann Humes has developed at SWRL is just that. In addition, it provides diagnostic information. This is an important point: If students do not succeed on a competency test, it is important to know why so that remedial instruction can be provided.

In this scoring system, there is a carefully designed prompt that tells students what to write (see Figure 4). Then there is a scoring key (see Figure 5) on the student answer sheet (or test booklet); the teacher scores each student's writing on the scoring key so that the results can be processed by computer.

The scoring key lists those features that are critical to good writing for that specific prompt. These features depend on both the content to be written and on the grade level of the students doing the writing. The teacher scores each student's writing on a three-point scale: good, acceptable, unacceptable. To complete this scoring, the teacher refers to a scoring guide that defines the qualities of the three ratings on the scale (see Figure 6).

Study this map of the neighborhood. Find the library and the museum.

Write directions that tell very clearly how to get from the library to the museum. Write the directions in an order that is easy to follow.

Do not leave out any important information about which way to go or what places to watch for along the way.

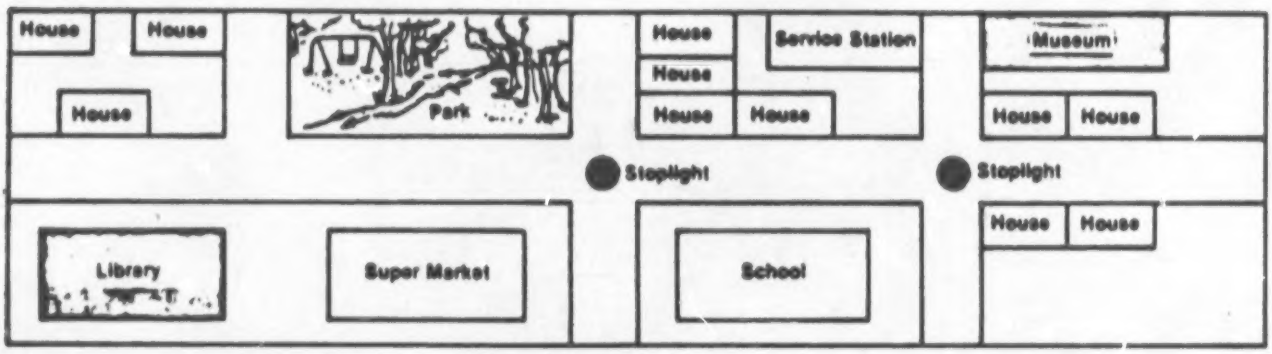

Figure 4. Writing-sample prompt (grade 5)

WRITING SAMPLE

Content

1	Includes important information about landmarks.	G A U
2	Includes important information about direction of movement . .	G A U
3	Writes directions in a logical order.	G A U
4	Uses appropriate transitional expressions for sequence	G A U
5	Uses precise and clear language	G A U

Form

6	Uses correct grammar	G A U
7	Uses good sentence structure . . .	G A U
8	Punctuates and capitalizes correctly	G A U
9	Spells correctly	G A U
10	Writes legibly, with appropriate margins, spacing, and indentation.	G A U

Figure 5. Writing-sample scoring key (grade 5)

CONTENT:

1. Includes important information about landmarks [i.e., park, school, stoplights, supermarket, service station].

   Good: Most landmarks are referenced, particularly the stoplight(s).

   Acceptable: Some landmarks are referenced.

   Unacceptable: No landmarks are referenced.

2. Includes important information about direction of movement [i.e., library to street, street to turning point, street to museum].

   Good: All directional information is given.

   Acceptable: Some directional information is given.

   Unacceptable: Little or no directional information is given.

3. Writes directions in a logical order.

   Good: All information is given in a sequential order.

   Acceptable: Most information is given in sequential order.

   Unacceptable: Little or no information is given in sequential order.

4. Uses appropriate transitional expressions for sequence [e.g., first/then/after].

   Good: A variety of transitional expressions is used appropriately.

   Acceptable: Some transitional expressions are used appropriately.

   Unacceptable: Few or no transitional expressions are used.

5. Uses precise and clear language.

   Good: Precise words are used to give directions; e.g., "left."

   Acceptable: General words are used to give directions; e.g., "down the street."

   Unacceptable: Language used does not convey sense of direction.

Figure 6. Writing-sample scoring guide (grade 5)

Figure 6. (continued)

FORM:

6. Uses correct grammar.

   Good: The composition has few or no grammatical errors.

   Acceptable: The composition has some grammatical errors.

   Unacceptable: The composition has many grammatical errors.

7. Uses good sentence structure.

   Good: All sentences are complete.

   Acceptable: Most sentences are complete.

   Unacceptable: Many sentences are fragments and/or run-ons.

8. Punctuates and capitalizes correctly [i.e., end-of-sentence and internal punctuation; proper names and the first word of sentences].

   Good: The composition has few or no errors.

   Acceptable: The composition has some errors.

   Unacceptable: The composition has many errors.

9. Spells correctly.

   Good: Most words are correctly spelled.

   Acceptable: Several different words are misspelled.

   Unacceptable: Many different words are misspelled.

10. Writes legibly, with appropriate margins, spacing, and indentation.

    Good: All words are readable; margins are present and consistent; the first word of paragraph(s) is indented.

    Acceptable: Most words are readable, and unreadable words do not interfere with comprehension of content; margins are present; the first word of most paragraphs is indented.

    Unacceptable: Many words are unreadable, margins are not present, and indentation is not used.

As you can see, this scoring system has several positive features that make it valuable for both teachers and school districts.

1. It requires very little time. Our experience indicates that a paper can be scored in 2-3 minutes, depending on grade level. Thus, a teacher can usually score all the papers in his/her class in about an hour.
2. It is inexpensive. Since it requires little time, teachers are willing to do the scoring, and they can do it as part of their regular work.
3. It requires no training. (Most currently used systems require extensive training before scoring is done.)
4. It is reliable. Different untrained scorers evaluate papers in similar ways; that is, two scorers are likely to agree on how to score a student's paper.
5. It provides diagnostic information. Based on scores for individual students or for a whole class, a teacher can make instructional decisions to teach students those skills that they are weak in.
6. It allows the point values of the features to be varied depending on their importance to the testers. For example, content criteria could be valued as 6-4-2, while form criteria could be valued as 3-2-1.
7. It is related to the specific prompt, which permits a more equitable evaluation of student abilities.

Thus, our experience with this scoring system indicates that it can be used successfully for evaluating students' writing.

SOME RESULTS OF GRADE-BY-GRADE ASSESSMENT

SWRL has designed the grade-by-grade assessments for a large metropolitan school district. The actual scores for these assessments are not presently available in public form, but I will indicate some of the trends we have found.

1. In general, elementary students perform well. Their scores are good for both multiple-choice items and for writing-sample items. While such comparisons may not be appropriate, we have noted that students frequently score higher in the written language area than in reading or math, although the latter two areas tend to receive the most emphasis in most elementary schools. Thus, we believe that students <u>are</u> learning to write.
2. Scores get lower as grade level increases. We believe that there are several reasons for that.
    a. More content is covered in the upper grades.
    b. The content is relatively more difficult in the upper grades.
    c. The new content in the upper grades receives much less attention in textbooks. (For example, in sixth-grade spelling books, an average of 70% of all exercises is devoted to review.) Thus, there is more content and more difficult content, but less instruction in this new content.

3. Students are generally good spellers. They are also fairly good with capitalization and punctuation.
4. Students generally do well with items assessing language usage, but poorly with items assessing grammatical knowledge. (Of course, many studies over the past 50 years have shown that knowledge of grammar has no effect on writing ability, so low scores on grammar are not a concern--except that they lower students' total scores.)
5. Students can alphabetize fairly well, but not as well as might be expected with such a mechanical skill.
6. Students do rather well in actual writing. "Good" and "Acceptable" scores on writing samples are generally above 70%, which is often higher than scores for multiple-choice items. This suggests that the "writing problem" is not nearly as serious as many critics suggest.

CONCLUSIONS

From our experience at SWRL, we have found that it is possible to assess English language competency, although such assessments must be based on instruction and must be carefully constructed. Actual writing skill can be assessed through a writing sample, using an efficient and reliable scoring system. Results from such competency testing suggest that students are learning to express themselves in writing.